

REMARKS

The Examiner rejects claim 1 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,710,772 to Sato. Applicant respectfully requests reconsideration.

In making the rejection, the Examiner asserts that "Sato discloses a method of classifying a received data frame as belonging to one of a plurality of possible classes (case 1, case 2, case 3 in figure 5), each of said classes having corresponding formats wherein a known bit pattern (for example SYNC(2)) is located in different respective positions with said data frame," page 3 of the Action. The Examiner also asserts that Sato shows "wherein the relation between the SYNC(1) and SYNC(2) determines the classes (present or absent of speech)," *id.* Applicant respectfully submits that these assertions are incorrect. Applicant submits that, in reaching these conclusions, the Examiner has confounded two separate processes in Sato -- those of 1) determining whether the frame contains speech or silence, and 2) evaluating channel quality and responding thereto. The "classes" for these two independent determinations are separate, not conjoined as required to support the rejection.

Applicant notes that the speech frames of Sato have a different frame format than the "silent period" frames of Sato. However, such is irrelevant when talking about the cases 1-3 upon which the Examiner relies, because cases 1-3 are all "silent period" frames, and are never speech frames. On this point, Applicant directs the Examiner's attention to the flow chart of Sato Figure 5, which limits the occurrence of cases 1-3 to only when speech is absent (i.e., a silent frame). This is plainly evident by noting that, in Figure 5, the three cases all flow out of decision box S206, which can only be reached from the "68bit" decision branch from decision box S202. This is plainly evident by the text accompanying Figure 5, which unequivocally states that decision box S202 is where the present or absence of speech is determined. Only if the frame is 68 bit/silent does the process flow toward decision box S206. See col. 6, lines 18-33 ("The TDMA processor 16 and the main controller 21 judge whether the uplink signals represent a time slot in an active speech period or one in a silent period (step S202)...Thus, if the data

length of the time slot is 324 bits, the time slot is an active speech period, or if it is 68 bits, the period is a silent one ... If at step S22 the data length is found to be 68 bits, i.e., if it is a silent period, the sync signal SYNC(1) is detected by the demodulator 14 ... and judges the line quality according to the bit error rate and the field intensity (step S206).") and col. 6, lines 53-55 ("If at step S202 the data length of the time slot is found to be 324 bits, i.e., if it is an active speech period, the speech signal is decoded (step S210)). Thus, Sato teaches that the process flow must be "if at step S202 the data length is found to be 68 bits, i.e., if it is a silent period, [go to] step S206."... [but] if at step S202 the data length of the time slot is found to be 324 bits, i.e., if it is an active speech period, [go to] step S210." Accordingly, the only way to reach the three "cases" flowing from step S206 pointed to by the Examiner is if the frame is for a silent period. Thus, all three of the "classes" pointed to by the Examiner must necessarily be from frames that are "silent" (without speech).

The Examiner's attention is next directed to Figure 1(c) of Sato, which shows the "68-bit time slot used ... during silent periods," col. 3, lines 53-55. This Figure 1(c) shows that both SYNC(1) and SYNC(2) are always in the same location within the frame for any and all silent period transmissions. Thus, it necessarily follows that Sato's SYNC(2) is in the same location within the frame for all of cases 1-3, because these "cases" are all the silent period transmissions that must follow the same frame format of Figure 1(c).<sup>1</sup> Thus, it is impossible for a "case 1" transmission to have a different frame format than a "case 2" or "case 3" transmission, because they must all follow the same format as taught by Sato. Stated differently, because the same frame format is used, case 1, case 2, and case 3 necessarily all have the bit pattern SYNC(2) in the same position within the frame. Thus, the "respective position" for the "corresponding formats" of cases 1-3 are all the same, not different. As such, it is impossible for Sato's case 1, case 2, and case 3 to in any way teach "classes having

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<sup>1</sup> The same logic requires that SYNC(1) is also always in the same location within the frame for Sato's cases 1-3, because all of these cases are necessarily silent period transmissions that must follow the same frame format.

corresponding formats wherein a known bit pattern is located in different respective positions within said data frame," as is required to anticipate claim 1. Simply put, the claim requires different respective positions for different classes, while Sato teaches the exactly opposite for cases 1-3 -- the same position for different classes. Thus, Sato simply cannot teach "... one of a plurality of possible classes, each of said classes having corresponding formats wherein a known bit pattern is located in different respective positions within said data frame," and instead teaches precisely the opposite (use the same position) for cases 1-3.

Applicant next notes that Sato teaches that the determination of speech/silence is made entirely based on the length of the frame and nothing else. See col. 6, lines 14-23. Further, Sato's classification into case 1, case 2, and case 3 has nothing to do with distinguishing between speech frames and silent frames, as all three "cases" are necessarily only silent frames, and can never be speech frames. While SYNC(1) and SYNC(2) are examined for silent frames, SYNC(2) is not examined for speech frames. The reason for this is quite simple -- SYNC(2) cannot be examined for speech frames because SYNC(2) is completely absent from speech frames, see Figure 1(b) and accompanying text. Nowhere does Sato teach or suggest looking at any "relation" between SYNC(1) and SYNC(2) to determine if speech is present or not; instead, Sato teaches that one should look only at the frame length. Thus, in contrast with the Examiner's assertion, Sato teaches absolutely nothing about looking at any "relation between the SYNC(1) and SYNC(2) [to] determine the classes (present or absent of speech)." Therefore, the Examiner's stated rationale for rejecting claim 1 is faulty, rendering the resulting rejection of claim 1 faulty as well.

In view of the above, Applicant respectfully submits that the Examiner's §102 rejection of claim 1 is improper as being unsupported by the cited art and the Examiner's rationale with respect thereto. Accordingly, Applicant submits that claim 1 defines patentable subject matter over the cited art.

Respectfully submitted,  
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Dated: July 19, 2005